REMARKS/ARGUMENTS

Status of the Application

Prior to entry of this amendment, claims 1, 4-11 and 13-34 were pending in the application. An Office Action mailed June 17, 2005, rejected claims 1, 4-11, 13-28 and 31-34 under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 5,469,495 to Beveridge ("Beveridge") in view of US Patent No. 5,523,868 to Hawley et al. ("Hawley") and JP 07264333A to Kumosaki ("Kumosaki"). Claims 29 and 30 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Beveridge in view of Hawley and Kumosaki, and further in view of US Patent No. 5,889,465 to Mercadante et al. ("Mercadante"). No claims have been amended, added or cancelled. Hence, after entry of this amendment, claims 1, 4-11 and 13-34 remain pending for examination.

Claim Rejections

The Office Action rejected claims 1, 4-11, 13-28 and 31-34 under 35 U.S.C. § 103(a) as being unpatentable over Beveridge in view of Hawley and Kumosaki. The Applicants respectfully traverse the rejections. Specifically, the cited references fail to teach each element of any pending claim and, in fact, teach away from some claims. Accordingly, the cited references properly cannot form a *prima facie* case of obviousness under § 103(a).

As the Office Action properly notes, Beveridge fails even to teach an alarm system incorporated within the electrical power source to monitor the operation of the electrical power source. While Hawley does teach an apparatus for monitoring power loss in a telecommunication system, Hawley does not teach an alarm system configured to monitor the operation of the electrical power source and to allow the provider to monitor an operational parameter of the power source via the fiber optic communication medium. Instead, Hawley discloses a detector (34) incorporated within the optical network unit itself. The detector merely acts as a "deadman's switch," which simply triggers the circuit when sensing the event of a power loss and enables the circuit to provide for a "dying gasp" transmission of an alarm

message regarding the power loss. In fact, Hawley teaches only that the detector "outputs a predetermined message on the distribution lines 20 through the electrical-to-optical converter 42. In a preferred embodiment, the message is repeated until the capacitor 30 is discharged." Because Hawley's message is prerecorded, it is difficult to see how this message might allow the provider to monitor an operational parameter of the power source.

Indeed, an Office Action mailed April 2, 2004, attempted to interpret Hawley in the same way as the current Office Action. The April 2, 2004, Office Action argued that "Hawley teaches a method for monitoring power loss in a telecommunication system in order to more quickly and more efficiently determine and repair a loss of power." In a response mailed July 2, 2004, the Applicants specifically addressed the Hawley reference and explained why Hawley is inapposite in this context. In response to this argument, the Office withdrew the rejections that relied on Hawley. The Applicants incorporate by reference the arguments from their July 2, 2004, response and submit that Hawley is no more relevant now than when the Examiner withdrew the rejections relying on Hawley earlier in the prosecution of this application.

Specifically, as noted in the July 2, 2004, response, the teaching of Hawley is not an alarm system to monitor the operation of an electrical power source but, in fact, a system for detecting and indicating a power failure at an optical network unit. Hawley, therefore, cannot be considered to teach (or even suggest) the limitations of claim 1. The alarm system of claim 1, being incorporated within the electrical power source, may monitor the operation of the electrical power source, which can include much more than merely the presence or absence of a supply voltage reaching the optical network unit. Also, as recited in Claim 27, electrical power source operation information can include parameters such as "information about an AC power source, information about a rectifier's voltage, information about a converter's voltage, and information about a current limiter's current," and the like. The detector (34) of Hawley presumably would provide no facility for this type of monitoring, since it is disposed not within the electrical power source but within the optical network unit itself, where such information presumably would be

unavailable. As the Office Action notes, neither Kumosaki nor Beveridge teach this element, and neither of these references, therefore, can remedy Hawley's failure of disclosure.

Moreover, even if Beveridge, Hawley and Kumosaki did collectively teach each element of claim 1, there would be no reasonable expectation of success in the combination. Figs. 5-7 of Beveridge, upon which the Office Action relies, teach a hybrid optical/coaxial environment, in which the signals between the ONU 15 and the subscriber location 21 are carried on coaxial cable. Indeed, Beveridge teaches the use of a special Baseband Below Passband (BBP) device 37 for converting the coaxial signals (*see* Beveridge, column 11, lines 10-19); in fact, this hybrid optical/coaxial network is the basis of Beveridge's invention. *See, e.g., id.*, column 7, lines 46-48 ("The invention relies on the use of fiber/coax passband infrastructure as the basic bearer channel for all services in the residential mass market served by the network.").

In contrast, Hawley teaches traditional local loop line circuits 24 (i.e., twisted-pairs) as providing communication between the ONU 18 and the subscriber location. *See* Hawley, column 4, lines 4-5. Indeed, Hawley relies on these line circuits 24 as part of the "deadman's switch" circuit for transmitting the alarm. *See id.* at column 4. line 62, through column 4, lines 9 (describing "a control signal (CNTL) which is coupled through the logic bus to the line circuit 24"). It is, therefore, difficult to see how Hawley and Beveridge could be combined with any reasonable expectation of success. On the one hand, Beveridge requires a coaxial connection between the ONU and the subscriber connection. On the other hand, Hawley requires a traditional line circuit (twisted pair) to implement its alarm circuit.

Further, if Beveridge were modified to incorporate the alarm circuit of Hawley (i.e., using a line circuit to carry a control signal), that modification would alter Beveridge's principal of operation—using a coaxial line to transmit signal between the ONU and the subscriber location. The two references, therefore, would seem to be incapable of combination, even if their combination did teach each element of claim 1 (which, as argued above, it does not).

As set forth in MPEP 2143, to establish a prima facie case of obviousness, a rejection must establish "three basic criteria . . . First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." The asserted combination of Beveridge, Hawley and Kumosaki meets none of these criteria. Therefore, for at least these reasons, Claim 1 is allowable over the cited combination. For at least similar reasons, independent claims 14, 31 and 33 are, likewise, allowable. Moreover, dependent claims 4-11, 13, 15-30, 32 and 34 are believed to be allowable at least by virtue of their dependence from allowable base claims.

Conclusion

In view of the foregoing, Applicants believe all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 303-571-4000.

Respectfully submitted,

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